

What is claimed:

1. A method for multimerizing chimeric proteins in cells which comprises:

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(a) providing cells which contain:

(i) a first recombinant nucleic acid encoding a first chimeric protein which binds to rapamycin or an analog thereof and which comprises at least one FKBP domain and at least one protein domain heterologous thereto, wherein the FKBP domain comprises a peptide sequence selected from:

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(1) a naturally occurring FKBP

(2) a variant of a naturally occurring FKBP in which up to 10 amino acid residues have been deleted, inserted, or replaced with substitute amino acids,

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(3) an FKBP encoded by a DNA sequence capable of selectively hybridizing to a DNA sequence encoding an FKBP of (i) or (ii);

(ii) a second recombinant nucleic acid encoding a second chimeric protein which forms a complex with both (a) rapamycin or a rapamycin analog and (b) the first chimeric protein, and which comprises at least one FRB domain and at least one domain heterologous thereto, wherein the FRB domain comprises a peptide sequence selected from:

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(1) a naturally occurring FRB domain,

(2) a variant of a naturally occurring FRB domain in which up to 10 amino acid residues have been deleted, inserted, or replaced with substitute amino acids,

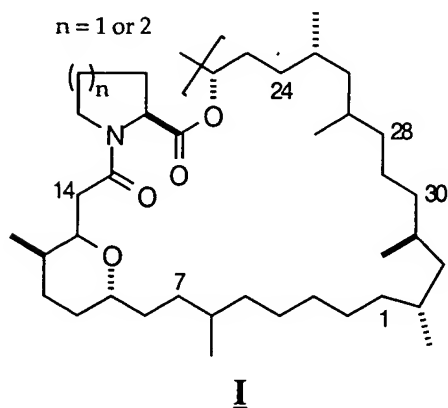
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(3) an FRB domain encoded by a DNA sequence capable of selectively hybridizing to a DNA sequence encoding an FRB of (iv) or (v);

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(b) contacting the cells with an improved rapalog which forms a complex containing itself and at least one molecule of each of the first and second chimeric proteins,

where the improved rapalog has an immunosuppressive effect less than 0.01 times that of rapamycin and comprises the substructure of formula I:



bearing one or more optional substituents, optionally unsaturated at one or more carbon-carbon bonds spanning carbons 1 through 8, as a substantially pure stereoisomer or mixture of stereoisomers, or a pharmaceutically acceptable derivative thereof.